

# Patent [19]

[11] Patent Number: 10296042

[45] Date of Patent: Nov. 10, 1998

---

## [54] PROCESS AND DEVICE FOR CLEANING GAS IN CLEAN ROOM

[30] Foreign Application Priority Data  
JP Feb. 28, 1997 09 60135

[21] Appl. No.: 10027841 JP10027841 JP

[22] Filed: Jan. 27, 1998

[51] Int. Cl.<sup>6</sup> B01D05334; B01D04610; B01D05300; B01D05304; B01D05386; B01J02020; B01J02024; B01J02026; B01J02106; B01J03502; B01J04712; F24F00706

## [57] ABSTRACT

**PROBLEM TO BE SOLVED:** To provide a gas cleaning process and a device for creating a superclean space in a clean room from which a gaseous toxic component is removed together with fine particles.

**SOLUTION:** A device for cleaning a cleaning room 5 or gas in a local space in the clean room 5 is provided with a dust removing filter 4 for removing the fine particles and the gaseous toxic component in gas, an adsorption device 9 filled with an adsorption material and a photocatalyst device D constituted of a photocatalyst 10 and a light source 11 emitting beam to the catalyst 10, and it is recommendable that adsorption material is active carbon and/or ion exchange fibers, that the photocatalyst is  $\text{TiO}_2$  and that a germicidal lamp generating ultraviolet beam of 254 nm for the light source emitting the beam.

\*\*\*\*\*